

Title (en)  
Wideband synthesizer and method thereof

Title (de)  
Breitbandsynthesizer und Verfahren dafür

Title (fr)  
Synthétiseur à large bande et son procédé

Publication  
**EP 2157698 A1 20100224 (EN)**

Application  
**EP 08290777 A 20080818**

Priority  
EP 08290777 A 20080818

Abstract (en)  
The present invention provides a wideband synthesizer device, comprising: a frequency generator; a first frequency divisor coupled to the frequency generator; a first switch coupled to the frequency generator; a second switch coupled to the first frequency divisor; a first and a second filter; a third and a fourth switch coupled to the first and second filter; an output port coupled to the first, second, third and fourth switch; a frequency controller coupled to the first frequency divisor and to the first, second, third and fourth switch. The frequency controller is adapted for sending control signal for controlling switching positions of at least one of the first and second switch, wherein the first frequency divisor is adapted for dividing a fundamental frequency signal of the frequency generator. The frequency controller is adapted for sending control signals for controlling switching position of at least one of the third and fourth switch, wherein the first and second filter are adapted for suppressing harmonics of the fundamental frequency signal of the frequency generator.

IPC 8 full level  
**H03L 7/18** (2006.01)

CPC (source: EP)  
**H04B 15/06** (2013.01); **H04B 2215/064** (2013.01)

Citation (applicant)  
• US 4940950 A 19900710 - HELFRICK ALBERT D [US]  
• WO 03065585 A1 20030807 - QUALCOMM INC [US]  
• US 5146186 A 19920908 - VELLA PAUL L [US]

Citation (search report)  
• [X] US 4940950 A 19900710 - HELFRICK ALBERT D [US]  
• [X] WO 03065585 A1 20030807 - QUALCOMM INC [US]  
• [A] US 5146186 A 19920908 - VELLA PAUL L [US]

Cited by  
CN104253292A; US9634772B2

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